UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2012/2013

COURSE NAME	:	WEB DEVELOPMENT
COURSE CODE	:	BIC 21203
PROGRAMME	:	1 BIW / 1 BIM / 1 BIS / 1 BIP
EXAMINATION DATE	:	JUNE 2013
DURATION	:	3 HOURS
INSTRUCTION	:	ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSISTS OF **SIX (6)** PAGES

Q1 Answer the following questions based on the given statement.

> In 1969, the Advanced Research Project Agency (ARPA) of the U.S Department of Defense (DoD) began connecting computers on different universities and defense contractors. The resulting network was called ARPANET.
>
> (Source: technofloyd.blogspot.com)

(a) State **FOUR (4)** locations of the primary host computers included in the ARPANET.

(4 marks)

(b) List **SEVEN (7)** components of the Internet Architecture.

(7 marks)

(c) Explain **THREE (3)** Internet and WWW protocols.

(6 marks)

(d) Give the difference between Telnet and File Transfer Protocol (FTP).

(2 marks)

(e) State the difference between the Internet resulted from ARPANET and the network backbones built by the private telecommunications companies.

(1 mark)

Q2 Answer the following questions based on the given case study.

> John owns a small bakery. One day he decides to advertise his business on the Internet. On his Web site, he wants to put information about breads, rolls, bagels, doughnuts, and cakes his bakery makes. Few times a year he comes with a new kind of bread or cake, so he would like his Web site to be updated when this happens. In addition, he wants to have a map with directions to help new customers with locating his bakery. He also decides that he is not going to sell his baking goods online.
>
> (Source: www.robertz.com)

(a) Identify the web programming approach used in developing John's website.

(2 marks)

(b) Compare **TWO (2)** web content preparation approaches in terms of their technology, content and functionalities.

(6 marks)

(c) Compare the advantages of adopting the approaches in **Q2 (b)**.

(4 marks)

(d) Compare the disadvantages of adopting the approaches in **Q2 (b)**.

(4 marks)

(e) Construct a HTML table as in **FIGURE Q2** that display John's bakeries.

Product Category	Item Name	Price
Bread	Raisin Bread	RM 3.00
Doughnut	Chocolate Doughnut	RM 1.00
Cake	Ice Cream Cake	RM 50.00

FIGURE Q2

(4 marks)

Q3 (a) Classify the input types in **FIGURE Q3 (a)** according to their input control categories.

(5 marks)

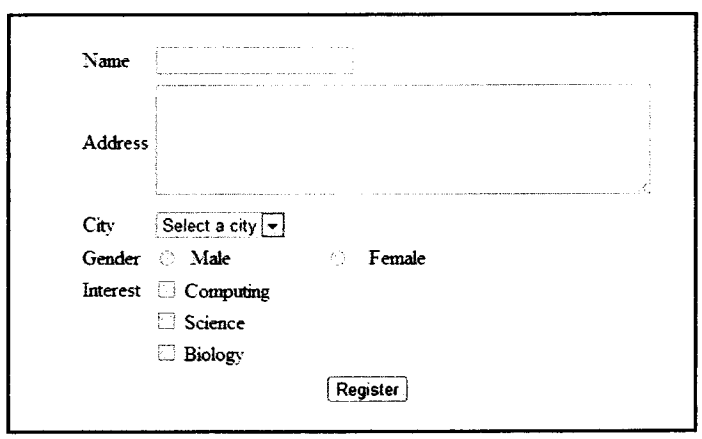

FIGURE Q3 (a)

(b) Classify the input types in **FIGURE Q3 (a)** according to how they are created (either using HTML tags or attributes of HTML tags).

(5 marks)

(c) Outline the output for the HTML code in **Table 1**.

(10 marks)

Table 1: HTML Code

```
<body>
<h1><b>Project Title and Team Members</b></h1>
<form>
  <input type="text" name="title"/>
  <input type="submit" name="button" value="Search Project Title" />
</form>
<br>
<p>2 matched search result:</p>
<table>
  <tr>
    <td><b>Title</b></td>
    <td><b>Team Members</b></td>
    <td align="center"><b>Action</b></td>
  </tr>
  <tr>
    <td>Sistem Tempahan Kenderaan UTHM</td>
    <td>
      <ol>
        <li>Azlin Binti Abdullah</li>
        <li>Nor Hanis Binti Nor Azmi</li>
        <li>Siti Fatimah Binti Ibrahim</li>
        </ol>
    </td>
    <td align="center"><p><a href="edit.php">edit</a></p></td>
  </tr>
  <tr>
    <td>Sistem Sewa Kereta</td>
    <td>
     <ol>
      <li>Zatun Najwani Binti Mohd Sabri</li>
      <li>Nurul Izni Binti Rahmat</li>
      <li>Norhazlin Binti Husni</li>
     </ol>
    </td>
    <td align="center"><p><a href="edit.php">edit</a></p></td>
  </tr>
</table>
</body>
```

Q4 Answer the following questions based on illustration in **FIGURE Q4**.

Given a data table named `books`, containing only fields named `bookAuthor`, `bookCategory` and `availability`,

bookAuthor	bookCategory	availability
John	science	available
Billy	biology	available
John	science	out of stock

FIGURE Q4

(a) Determine if there is any suitable field as a candidate for a primary key. If there is, state the field.

(1 mark)

(b) Explain your answer in **Q4 (a)**.

(2 marks)

(c) Propose appropriate solution for **Q4 (b)** (You may alter the data table's fields).

(2 marks)

(d) Construct an SQL statement to create data table proposed in **Q4 (c)**.

(5 marks)

(e) Suggest **TWO (2)** possible web functionalities for data table in **FIGURE Q4**.

(2 marks)

(f) Give **FOUR (4)** examples of relational database management system for data table in **FIGURE Q4** that you know.

(4 marks)

(g) List the entity and attributes in **FIGURE Q4**.

(4 marks)

Q5 Answer the following questions based on illustration in **FIGURE Q5**.

FIGURE Q5

(a) Modify the attribute for each data table so that table `customer` can be related to table `orderrec`.

(3 marks)

(b) Explain the modification made in **Q5 (a)**.

(2 marks)

(c) Construct an SQL statement to create both data tables altered in **Q5 (a)**.

(7 marks)

(d) Identify suitable foreign key for table `orderrec`.

(1 mark)

(e) Explains why the attribute in **Q5 (d)** are selected as a foreign key.

(1 mark)

(f) Construct an SQL statement which assigns the foreign key in **Q5 (d)** into table `orderrec`.

(3 marks)

(g) Identify the types of relationship between the data tables in **Q5 (a)**.

(1 mark)

(h) Explain your answer in **Q5 (g)**.

(2 marks)

- END OF QUESTION -